



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,610	01/30/2004	Rustom Sam Kanga	2156-301A	7057

7590 03/22/2005

John L. Cordani  
Carmody & Torrance LLP  
P.O. Box 1110  
50 Leavenworth Street  
Waterbury, CT 06721-1110

EXAMINER

HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
----------	--------------

1752

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/768,610

Applicant(s)

KANGA, RUSTOM SAM

Examiner

Cynthia Hamilton

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-5, 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/30/05</u> | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-5 and 26, drawn to a photosensitive printing element, classified in class 430, subclass 273.1.
  - II. Claims 6-25, drawn to a method of making a hollow cylindrical printing sleeve, classified in class 430, subclass 306.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product as in one wherein the masking layer was put down by inkjet in an imagewise fashion thus never needing to be removed by exposing the masking layer to laser radiation at a selected wavelength as required in the process of Invention II or the masking layer. The photosensitive printing element of Invention I is not required to have a back exposure to form a lithographic printing plate whereas the methods of Invention II require such because the method must form a relief surface.
3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II and the search for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

Art Unit: 1752

4. During a telephone conversation with Ms. Jennifer Calcagni on February 17, 2005 a provisional election was made with traverse to prosecute the invention of Group II, claims 6-25. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-5 and 26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanga (6,413,699) in view of Fan (5,262,275) and Cushner et al (5,798,019). Kanga teaches the instant method of claims 6-10 and 14 with the exception of formation of a hollow cylindrical support. However, Kanga discloses as prior art Fan 5,262,275. Fan teaches that a cylinder can be used in col. 11 as a support and Cushner et al teach the formation of Fan systems on cylindrical seamless cylinders. Kanga teaches the need when backflashing the plates such as those of Fan that a substrate of 85-95% absorbing actinic radiation is needed in order to get an even floor formed for good printing. Fan teaches the advantage of avoiding the need for a negative being formed by using the ablatable coverlayers. Cushner et al teaches the formation of seamless printing cyclinders to avoid the bumps formed when solid plates are adhered to cyclinders to form an arcuate surface. With respect to instant claims 6-10 and 14, the formation of Kanga's plates into the seamless cylinders of Cushner et al using the materials of Fan in order

Art Unit: 1752

to avoid forming a negative and to obtain a more perfect printed image would have been prima facie obvious. In Fan, see particularly col. 2, 10, and 11. in Cushner et al, see particularly col 16-17, 21-22. In Kanga, see particularly the abstract, The Field of the invention, the paragraph bridging col 1-2, col. 2, lines 49 to col. 3, lines 46, col. 6, lines 27-col. 7, lines 30.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanga (6,413,699) in view of Fan (5,262,275) and Cushner et al (5,798,019) as applied to claim 6 above, and further in view of Gush et al (3,619,601) and Weber (3,615,450) and Gelbart (6,180,325) and Ohba et al (6,664,999). The imaging of relief plates with collimated light sources is well known in the relief printing plate art in order to form a finer image. Weber teaches the use of such for this reason. In Weber, see particularly col. 11, line 23-26, col. 13, lines 35-41, col. 14, lines 7-62. Gush teaches the use of collimated light col. 5. Gelbart teaches using a reflector to collimate the exposure light in col. 1, lines 41-53 and col. 2, lines 49-col. 3, lines 17 and Fig. 2, number 37. Ohba et al teach using collimator lens to image a printing plate on a cylinder in the abstract, and summary of the invention. Thus, with respect to claim 11, in order to obtain finer images and to avoid light scatter, the use of a collimated light source to image the cylinders set forth in the above paragraph with regard to Kanga, Fan and Cushner et al would have been prima facie obvious.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanga (6,413,699) in view of Fan (5,262,275) and Cushner et al (5,798,019) as applied to claim 6 above, and further in view of Kitamura et al (4,868,090). There is no disclosure in Kanga, Fan or Cushner et al to exposing the entire surface of the photosensitive printing element to actinic radiation at one time. However, such is known in the art as taught by Kitamura et al in col. 11

Art Unit: 1752

lines 3-42. With respect to instant claim 12 the use of such a quick exposure instead of a scanning exposure would have been prima facie obvious to save time in imaging the surface of the cylinder.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanga (6,413,699) in view of Fan (5,262,275) and Cushner et al (5,798,019) as applied to claim 6 above, and further in view of Kitamura et al (4,868,090) as applied to claim 12 above, and further in view of Plambeck, Jr. (2,791,504) and Ferree et al (1,986,052). The combination of Kanga, Fan and Cushner et al in view of Kitamura et al do not teach the use of the collimators having first and second opposing major faces and comprising at least one cell that extends from the first major face to the second major face, wherein at least one surface substantially absorbs actinic radiation incident upon the surface and actinic radiation passes through the collimator before reaching the photopolymerizable printing sleeve. However, Plambeck Jr. taught that if lines formed were broadened excessively because of their fineness then the use of a light controlling baffle, e.g. an egg-crate baffle, could be used to eliminate those rays below the minimum desired angle. In Plambeck, jr., see particularly col. 4, lines 57-69. An egg crate baffle is described by Ferree et al in Fig 6, a device for eliminating the glare and having intersecting baffle plates parallel to the focal axis and preferably of considerable width. The baffle plates preferably have dull finished surfaces, i.e. non light reflecting surfaces. Thus, with respect to the desire to obtain a finer image in the formation of relief plates then the use of a device such as the egg crate baffle taught by Plambeck to control the angle of light, i.e. collimate the light, in imaging the cylinders of Fan and Kushner would have been prima facie obvious.

Art Unit: 1752

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanga (6,413,699) in view of Fan (5,262,275) and Cushner et al (5,798,019) as applied to claim 14 above, and further in view of Plambeck, Jr. (2,791,504) and Ferree et al (1,986,052). As to the methods and plates set forth by the combination of Fan, Kanga and Cushner et al above, the use of a collimated light source is not taught. However, Plambeck Jr. taught that if lines formed were broadened excessively because of their fineness then the use of a light controlling baffle, e.g. an egg-crate baffle, could be used to eliminate those rays below the minimum desired angle. In Plambeck, jr., see particularly col. 4, lines 57-69. An egg crate baffle is described by Ferree et al in Fig 6, a device for eliminating the glare and having intersecting baffle plates parallel to the focal axis and preferably of considerable width. The baffle plates preferably have dull finished surfaces, i.e. non light reflecting surfaces. Thus, with respect to the desire to obtain a finer image in the formation of relief plates then the use of a device such as the egg crate baffle taught by Plambeck to control the angle of light, i.e. collimate the light, in imaging the cylinders of Fan and Kushner would have been prima facie obvious.

11. Claims 16-17, 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fan (5,262,275) in view of Cushner et al (5,798,019). further in view of Plambeck, Jr. (2,791,504) and Ferree et al (1,986,052). Fan teaches that a cylinder can be used in col. 11 as a support and Cushner et al teach the formation of Fan systems on cylindrical seamless cylinders. Cushner et al teaches the formation of seamless printing cylinders to avoid the bumps formed when solid plates are adhered to cylinders to form an accurate surface. What is not taught within Fan and Cushner is the use of a collimated light source for exposing the photopolymerizable layer. However, Plambeck Jr. taught that if lines formed were broadened excessively because of their

Art Unit: 1752

fineness then the use of a light controlling baffle, e.g. an egg-crate baffle, could be used to eliminate those rays below the minimum desired angle. In Plambeck, jr., see particularly col. 4, lines 57-69. An egg crate baffle is as described by Ferree et al in Fig 6, a device for eliminating the glare and having intersecting baffle plates parallel to the focal axis and preferably of considerable width. The baffle plates preferably have dull finished surfaces, i.e. non light reflecting surfaces. Thus, with respect to the desire to obtain a finer image in the formation of relief plates then the use of a device such as the egg crate baffle taught by Plambeck to control the angle of light, i.e. collimate the light, in imaging the cylinders of Fan and Kushner would have been prima facie obvious.

12. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fan (5,262,275) in view of Kushner et al (5,798,019). further in view of Plambeck, Jr. (2,791,504) and Ferree et al (1,986,052) as applied to claim 16 above, and further in view of Kanga (6,413,699). The methods made obvious by Fan and Kushner et al in view of Plambeck, Jr and Ferree et al do not disclose the use of a substrate with 85-95 percent blocked light for back exposure for forming a floor. However, Kanga teaches such a support with materials like that of Fan in order to obtain a more even floor and thus better printed images. In Kanga et al, see particularly the Abstract, col. 2 and 3, and col. 6. lines 15-50. Thus, with respect to instant claims 17-20, the use of such supports as those of Kanga with the methods of Fan using collimated light with an egg crate baffle as needed as taught by Plambeck for fine imaging would have been prima facie obvious to obtain better printed images because of a more even floor being formed by backflash exposure.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.



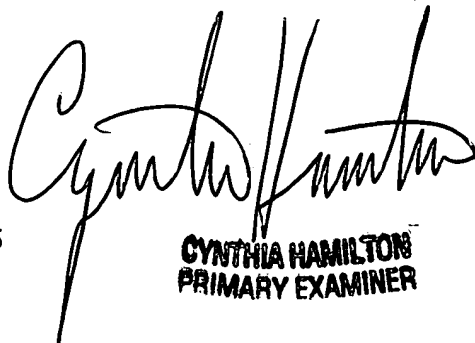
14. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 7 recites the limitation "the hollow cylindrical base layer" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331. The examiner can normally be reached on Monday through Friday 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 21, 2005



**CYNTHIA HAMILTON  
PRIMARY EXAMINER**

Cynthia Hamilton  
Primary Examiner  
Art Unit 1752